

# State Agency Energy Information Bulletin

Information for  
Agency Energy Managers  
and FASER Users at  
Virginia State Agencies

## Governor Issues Revised VEP

Governor Allen recently issued **Executive Memorandum 1-97** calling for the implementation of the revised **Virginia Energy Plan**. Building on the success of the previous statewide energy plan, the goals of the 1997 Virginia Energy Plan are to operate Virginia state government as a model of energy efficiency and to ensure the sustainable use of energy in Virginia. Objectives and strategies under these goals include reducing energy cost and consumption in state-owned facilities by 25%, encouraging economic development of emerging energy technologies and indigenous energy resources, and providing energy education and outreach to Virginia's citizens.

The revised Virginia Energy Plan incorporates feedback from participating state agencies expressed in an evaluation survey conducted in the spring of 1995. As a result, the 1997 Virginia Energy Plan has a narrower focus, concentrating on efforts to reduce energy cost and consumption in state operations. The administrative burden on state agencies has been reduced so that agencies may concentrate their resources on efforts to save energy.

Achieving the goal of operating Virginia state government as a model of energy efficiency will take the cooperation and commitment of all agencies. Agencies have demonstrated that they will be able to meet this challenge through their efforts under the previous Virginia Energy Plan. As a result, over \$4.2 million in energy costs are being saved annually in the Commonwealth. However, there is still much work to be done.

Improving energy conservation and efficiency in state government operations through careful planning and directed efforts can greatly improve the bottom line of state government. Recognizing that the greatest impact on state energy consumption is achieved through energy efficiency improvements in facility management, the Virginia Energy Plan concentrates on those agencies that operate state facilities. However, many improvements in energy efficiency exist for energy savings through modifications in employee behavior and administrative operations, such

as carpooling and procurement. Therefore, the participation of all agencies is important.

DMME has provided agency energy managers with an *Agency Energy Management Resource Guide* to assist them with their responsibilities under the Virginia Energy Plan. In addition, DMME will continue to provide agencies with ongoing guidance and assistance as they develop and implement their individual agency energy management plans. For more information, contact Kendra Shifflett at (804) 692-3230 or email: [kbs@mme.state.va.us](mailto:kbs@mme.state.va.us). ❖

## New Grant Program for State Facilities

DMME has recently announced the start of the **State Agency Energy Conservation Grants Program**. Grants up to \$50,000 will be awarded in October, 1997 to state agencies to implement a wide range of energy conservation and efficiency projects. Eligible retrofit measures include lighting upgrades, energy efficient boilers, building insulation projects, and energy management control systems. One million dollars have been allocated for this program. Should funding requests exceed funds available, projects will be ranked based upon simple payback from lowest to highest. Agencies may submit multiple measures and buildings for funding consideration. Each measure must be supported by technical calculations for energy savings and detailed cost estimates. The application submission deadline is Friday, September 5, 1997. For further information, or to request State Agency Energy Conservation Grants application materials, please contact Vernon W. Banks at (804) 692-3227 or email: [vwb@mme.state.va.us](mailto:vwb@mme.state.va.us). ❖

## Virginia Wins Green Lights Gold Medal

The U.S. Environmental Protection Agency recently awarded the Commonwealth of Virginia a Gold Medal for their achievements in preventing pollution through lighting efficiency upgrades as partners in the EPA Green Lights program. To date, state agencies have surveyed 17% of

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the 69 million square feet the Commonwealth has committed to the program, and have upgraded over 8% of the total square footage to energy efficient lighting. By performing these upgrades, state agencies are saving the Commonwealth almost \$900,000 a year in energy costs. Reductions in energy costs are not the only benefits. It has been shown that increased lighting *quality*, especially when employing natural daylighting, has a positive impact on employee productivity. In addition to financial savings, considerable environmental savings are achieved through lighting efficiency upgrades. The following table summarizes the energy and environmental achievements state agencies can be proud of:

<b>LIGHTING LOAD REDUCED</b>	<b>2,620 kW</b>
<b>ELECTRICITY REDUCTION</b>	<b>12,378,304 kWh</b>
<b>POLLUTION PREVENTION</b>	
<b>CARBON DIOXIDE (CO<sub>2</sub>)</b>	<b>19,668,790 lbs</b>
<b>SULFUR DIOXIDE (SO<sub>2</sub>)</b>	<b>222,232 lbs</b>
<b>NO<sub>x</sub></b>	<b>70,464 lbs</b>
<b>HEAVY METALS</b>	<b>27 lbs</b>

Lighting efficiency upgrades are some of the easiest and most cost effective energy reduction measures available to state agencies, and can often be accomplished using in-house staff. For more information on lighting reductions in state facilities, please contact Kendra Shifflett at (804) 692-3230 or e-mail: kbs@mme.state.va.us. ❖

## 1998 NICE<sup>3</sup> PROGRAM

The U.S. Department of Energy (DOE) sponsors an innovative cost-sharing program to promote energy efficiency, clean production, and economic competitiveness in industry. The grant program is known as **NICE<sup>3</sup>**: *National Industrial Competitiveness Through Energy, Environment, and Economics*. NICE<sup>3</sup> provides funding to state and industry partnerships for projects that develop and demonstrate advances in energy efficiency and clean production technologies.

This year the solicitation period will open on August 1, 1997, and close on December 10, 1997.

The **Optional Project Summary** period is now open and closes July 1, 1997. The Optional Project Summary

portion of the NICE<sup>3</sup> Program allows potential applicants to submit a two-page abstract and receive written feedback within two weeks. It provides the applicant with general information on how well the proposed technology fits the goals of the NICE<sup>3</sup> Program.

For more information on the 1998 NICE<sup>3</sup> Program, please contact Susan Thomas at (804) 692-3226, or e-mail: smt@mme.state.va.us. ❖

## Identifying High Value Solar Applications

DMME is working with the National Renewable Energy Laboratory to identify potential high value photovoltaic and solar water heating applications for state facilities. Using FASER energy cost and consumption data, a targeting methodology and customized computer tools are being developed to rank Virginia agencies and facilities by determining a *solar water heating attractiveness score*. Several of the most promising agencies will be contacted to determine their interest in use of solar and to gather additional information for a more detailed solar evaluation of their facilities. For more information on this program or cost effective solar applications for state facilities, please contact Susan Thomas at (804) 692-3226 or email: smt@mme.state.va.us. ❖

## Effort Aimed at Improving FASER Data

Consistent with the DMME philosophy of Continuous Quality Improvement (CQI), the Division of Energy is beginning a detailed assessment of the state energy monitoring program. Several of the major goals of the CQI study will be to:

- determine the **barriers** to agency participation in the energy monitoring program, and develop methods to eliminate these barriers;
- improve the **quality** of the data being gathered, and better determine actual state government energy cost, consumption and VEP induced savings; and
- enhance the **value** of the energy cost and consumption data to individual agencies as they implement their agency energy management plans.

Agency input will be requested to help determine ways the Division of Energy can improve the quality of services offered to our state agency customers under this program. For more information on the energy monitoring program CQI initiative, please contact Ken Jurman at (804) 692-3222, or e-mail: ks@mmme.state.va.us. ❖

## Solarex Seeking Applicants to Demonstrate Power of New Solar Electric Technologies

Solarex, a business unit of Amoco/Enron Solar, together with Virginia Power, Virginia's Center for Innovative Technology, and the Virginia Department of Mines, Minerals, and Energy is soliciting proposals from Virginia end-users and building owners in the commercial/governmental and industrial sectors who are interested in having solar electric (also known as photovoltaic) power systems installed at their facility at a significantly reduced price. Specific applications of interest include rooftop systems, building integrated systems and micro-grid applications in remote areas. A workshop is planned for July 11, 1997 to assist interested parties in identifying applications and submitting proposals. To receive an invitation to the workshop or a Request for Proposal package, contact Brien Poffenberger at Solarex at (301) 698-4453 or via email at [bpoff@solarex.com](mailto:bpoff@solarex.com). ❖

## Energy Code Compliance Made Easy

A new product, available at no cost over the Internet, offers a simple and cost-effective approach to meeting compliance with commercial energy codes.

Developed by the U.S. Department of Energy's Building Standards and Guidelines Program, **COMcheck-EZ™** can be used with most commercial energy codes based on ASHRAE/IES Standard 90.1-1989, Energy Code for Commercial and High-Rise Residential Buildings. The product focuses on code requirements that apply to most small or simple commercial buildings. It also offers a streamlined process for demonstrating code-equivalent levels of energy efficiency for envelope, lighting, and mechanical systems.

**COMcheck-EZ** eliminates calculation tasks, other than determining square footage, and requires no specialized technical knowledge of commercial codes. When applied to simple buildings, it is self-contained, requiring no additional resources or reference books.

**COMcheck-EZ** offers two compliance methods: 1) printed guidelines and worksheets and 2) computer software. Either way, the process is easy. Guides lead users through the applicable requirements in each major section of the code: lighting, envelope, and mechanical. The guides explain applicable requirements and

provide simple worksheets and compliance certificates containing checklists for building department use in plan review and field inspection. The software shares many of the same features but offers greater flexibility in key areas and even does the arithmetic and table lookups. With simple instructions and extensive user help functions, the software is designed with ease-of-use as its primary objective.

Download **COMcheck-EZ** from the Building Standards and Guidelines Program home page at <http://www.energycodes.org> or call the Program's Hot Line at 800-270-CODE where you can order **COMcheck-EZ** guides and software for a \$20 duplication fee. ❖

## Are You Prepared for the new Millennium?

The Millennium is fast approaching. Will your organization avoid what may be, at least for the unprepared, a *rude awakening* on New Year's day, 2000? We are not referring to the "morning after" ailments following the last party of the 20th century, but instead the realization that your energy management systems, equipment and other building control systems, and *energy accounting systems* effectively "died" at the stroke of midnight, December 31, 1999.

The problems will be the result of what has come to be known as "The Year 2000 Problem" (also referred to as "The Millennium Bug"). This "problem" began in the early days of computing (the 60s and 70s) when, to conserve precious memory resources, computers were programmed to store dates using the format **dd/mm/yy**. For example, December 31, 1997 is stored as 12/31/97. Many programs rely heavily on these two-digit date fields to perform important calculations. Programs which are not "year 2000" or "millennium-compliant" will not see January 1, 2000 for what it is, but will instead see the date 01/01/00. They will in effect roll their internal calendars back to the year **1900**. This may mean disaster for any systems which rely on computers to perform operations based on calendar dates.

## Does This Mean FASER 9 is Obsolete?

Unfortunately, FASER 9 **will** expire on December 31, 1999, and a millennium-compliant version is not available at this time. Omnicomp has indicated a compliant version may be produced if customer demand exists. The cost for this upgrade, however, may rule out the possibility of pursuing this as viable option. DMME will be studying

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solutions to this problem in the coming months as part of our Continuous Quality Improvement assessment of the energy monitoring program (see page 2).

### Are Your Computer Systems Ready?

In accordance with **Executive Memorandum 2-96**, the Virginia Department of Information Technology has developed an Internet site for use by Virginia agencies and institutions that are addressing Year 2000 issues affecting their computer hardware and software systems. This site is located at <http://www.state.va.us/dit/dit.html>.

**Now** is the time to make sure your computers are ready for the new century. Any software should be considered suspect unless guaranteed millennium-compliant by the manufacturer.

### Compact Fluorescent Downlights

Efficiency upgrades to downlights typically involve replacing the incandescent lamp with a standard screw in compact fluorescent. This often results in reduced light output, since these fixtures usually are not equipped with reflectors designed to properly direct the light out of the fixture, and may also not be acceptable where the aesthetics of the fixtures are a concern.

Delray Lighting, Inc. specializes in *custom compact fluorescent downlight systems* designed to eliminate these shortfalls. Single, double, and triple lamp luminaire models are available with both vertical and horizontal specular reflectors. For information, contact William Lane at Energy Experience, Inc. (540) 345- 6059. ☒

**Please note:** DMME makes no warranty or assumes any liability for the success or failure of energy conservation products or procedures described in this Bulletin. References to specific products or services should not be construed as endorsements. Please use your best judgement.



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Please file this Bulletin in **Section 10**  
of your *Agency Energy Management*  
*Resource Guide*